

# TORONTO STOCK EXCHANGE

## LISTING STATEMENT

## FINANCIAL

### OKA RARE METALS MINING COMPANY LIMITED

Incorporated under the Ontario Companies Act by Letters Patent dated March 22, 1954.

Supplementary Letters Patent issued to the Company dated May 28, 1954, and August 17, 1954.

1. Address of the Company's Head Office and of any other offices:

Room 601, 112 Yonge Street, Toronto, Ontario.

2. Officers of the Company:

OFFICE HELD	NAME	ADDRESS	OCCUPATION
President	Charles Glenn Hunter	415 Glenayr Road, Toronto, Ontario	Mining Executive and Prospector
Vice-President	Wilbur Ralph Salter	496 Russell Hill Road, Toronto, Ontario	Solicitor
Vice-President	Rolland Le Roy Ehrman	Elm Court, Butler, Pa., U.S.A.	Attorney
Treasurer	Anton Felix Reetz	410 Grant Street, Millvale, Pa., U.S.A.	Banker
Secretary	Barnabas William Nixon Apple	33 De Vere Gardens, Toronto, Ontario	Solicitor

3. Directors of the Company:

NAME	ADDRESS	OCCUPATION
Charles Glenn Hunter	415 Glenayr Road, Toronto, Ontario	Mining Executive and Prospector
Wilbur Ralph Salter	496 Russell Hill Road, Toronto, Ontario	Solicitor
Rolland Le Roy Ehrman	Elm Court, Butler, Pa., U.S.A.	Attorney
Anton Felix Reetz	410 Grant Street, Millvale, Pa., U.S.A.	Banker
Barnabas William Nixon Apple	33 De Vere Gardens, Toronto, Ontario	Solicitor
Basil Filardi, Jr.	40 Church Street, White Plains, N.Y., U.S.A.	Attorney
Carl Thomas Brelos	105 South Grandview Avenue, Crofton, Pittsburgh, Pa., U.S.A.	Broker
Roger Sherman Phillips	Wilson Point, South Norwalk, Conn., U.S.A.	Executive
John Denton Reilly	148 Donegal Drive, Toronto, Ontario	Solicitor

4. Names and addresses of all transfer agents:

Crown Trust Company, 302 Bay Street, Toronto 1, Ontario.

5. Particulars of any fee charged upon transfer other than customary government taxes:

A fee of 50c is charged on each share certificate issued consequent upon a transfer.

6. Names and addresses of all registrars:

Crown Trust Company, 302 Bay Street, Toronto 1, Ontario.

7. Amount of authorized capital: \$5,000,000.00.

8. Number of shares and par value: 5,000,000 shares of \$1.00 each.

9. Full details of all shares issued in payment for properties or for any other assets other than cash:

July, 1954..... 900,000      These shares were issued for the various mining claims hereinafter referred to which are presently owned by the Company.

Total..... 900,000

This listing statement is a copy of the listing application made by the applicant company. The Exchange has received no consideration in connection with the issue of this listing statement other than the customary listing fee. The papers and exhibits submitted by the applicant company in support of the listing application are open for inspection at the general office of the Exchange.



10. Full details of all shares sold for cash.

Date	No. of Shares	Price per Share	Amount realized by Company
1954—April.....	10	\$1.00	\$ 10.00
July.....	300,000	.10	30,000.00
*December	138,500	.50	62,325.00
1955—*January....	77,500	.50	34,875.00
*February..	127,900	.80	76,740.00
February..	70,000	.60	42,000.00
March.....	90,000	.60	54,000.00
March.....	40,000	.60	24,000.00
April.....	200,000	.65	130,000.00
April.....	200,000	.70	140,000.00
April.....	100,000	.80	80,000.00
Total.....	1,343,910		\$673,950.00

\*NOTE: The Company paid a commission of 10% on the 216,000 of its shares sold at 50c each and a commission of 25% on the 127,900 of its shares sold at 80c, thus resulting in the respective amounts therefore received by the Company as reflected above.

11. Total number of shares issued.

2,243,910.

12. Number of shares now in treasury or otherwise unissued.

2,756,090.

13. Particulars of any issued shares held in trust for the Company or donated for treasury purposes.

Nil.

14. Date of last annual meeting.

None held yet.

15. Date of last report to shareholders.

None yet issued.

16. Details of any treasury shares (or shares issued subject to payment or shares held for the benefit of the treasury) now under option or the subject of any underwriting or sales agreement. If none, this to be stated.

By agreement dated February 14th, 1955, Davidson Securities Limited of Toronto underwrote 50,000 shares at 60c and secured options on 850,000 shares at prices ranging from 60c to \$1.00. The underwritten shares and 650,000 optioned shares have been taken up, as set out in item 10 above, and there is presently outstanding only an option to purchase 200,000 shares of the Company until May 18th, 1956, at \$1.00 per share.

17. Details of any shares pooled, deposited in escrow, non-transferable or held under any syndicate agreement or control.

810,000 shares, part of the stock issued in payment for properties as set out in item 9, are held in escrow by Crown Trust Company, Toronto, subject to release, etc., only upon the written consent of the Company and the Ontario Securities Commission.

18. Details of any registration with or approval or authority for sale granted by or any filing with a Securities Commission or corresponding Government body.

Prospectus of Company accepted for filing by Ontario Securities Commission on October 12th, 1954. Amendment to prospectus accepted for filing by Ontario Securities Commission on February 16th, 1955.

19. Has any application for registration with, or approval or authority for sale by or any filing with a Securities Commission or corresponding Government body ever been refused, cancelled or revoked? If so, give particulars.

No.

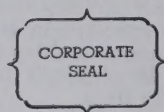


20. Particulars of any bonds, debentures, notes, mortgages, charges, liens or hypothecations outstanding.	Nil.
<p>21. Enumerate fully, giving claim or property numbers, approximate acreage, townships and mining camp or oil field:</p> <p>(a) Properties owned where titles vested in Company.</p> <p>(b) Properties leased.</p> <p>(c) Properties otherwise held.</p> <p>Give particulars of title held by the Company in each instance, (e.g. patented, unpatented, Crown granted, held under mining license, perpetual lease, etc.)</p>	<p>The Company is the recorded holder, free of encumbrance, of 132 mining claims in the Oka area, Province of Quebec, covering approximately 5,738 acres and being claims Q-82749 to Q-82765, both inclusive; Q-83423; and Q-83679 to Q-83792, both inclusive. Forty-eight of these mining claims are held under development license and application has been filed for development licenses covering the other 84 claims.</p> <p>There are no properties otherwise held by the Company, and it holds no properties under lease.</p>
22. Full particulars of any royalties or other charges payable upon production from each individual property.	Nil.
23. Are any lawsuits pending against the Company or any of its properties, or are there any other circumstances which might affect the Company's position or title adversely? If so, explain fully.	No.
24. Describe plant and equipment on property.	The Company owns a one-ton Chevrolet truck as well as scintillometers and dip needle.
25. Describe development accomplished and planned.	Following completion of an airborne radioactive and magnetic survey and a surface grid scintillometer and dip needle survey, diamond drilling was carried out, as reflected in the report of Mark G. Smerchanski herewith. Diamond drilling is currently still in progress and, based upon results obtained, it is planned to commence shaft sinking at an early date.
26. Date and author of mining engineer's or petroleum geologist's report filed with this application and available for inspection on request.	Report of Mark G. Smerchanski dated April 4th, 1955.
27. Full particulars of production to date.	Nil.



28. Have any dividends been paid? If so, give dates, per share rate, and amount paid in dollars on each distribution.	No.
29. Name and address of the solicitor or attorney whose certificate that the applicant is a valid and subsisting company and that the shares which have been al- lotted and issued were legally created and are fully paid and non-assessable has been filed with the Exchange.	Salter, Reilly & Jamieson, 112 Yonge Street, Toronto 1, Canada.
30. (a) Have any shares of the Company ever been listed on any other stock exchange? If so, give particulars.	No.
(b) Is any application for listing the shares of the Company on any other stock exchange now pending or contemplated? If so, give particulars.	No.
(c) Has the listing of any shares of the Company ever been refused or deferred on any stock exchange? If so, give particulars.	No.
31. Particulars of the principal busi- ness in which each director has been engaged during the past five years, giving the length of time, position held and name of employing company or firm.	<p>CHARLES GLENN HUNTER has been a mining executive and prospector, self-employed, for over five years.</p> <p>WILBUR RALPH SALTER, solicitor, senior partner of Salter, Reilly &amp; Jamieson, solicitors, Toronto, for over five years.</p> <p>ROLLAND LE ROY EHRLMAN, attorney-at-law, is the vice-president and treasurer of T. W. Phillips Gas &amp; Oil Company, and has been associated with that firm for over five years.</p> <p>ANTON FELIX REETZ has been a banker with the Bank of Millvale, Pittsburgh, for over five years.</p> <p>BARNABAS WILLIAM NIXON APPLE, solicitor, has been a member of the firm of Salter, Reilly &amp; Jamieson, solicitors, for over five years.</p> <p>BASIL FILARDI, Jr., attorney-at-law, has been a member of the firm of Filardi &amp; Caruso, attorneys, White Plains, N.Y., for over five years.</p> <p>CARL THOMAS BRELOS has been a broker with Hemphill, Noyes &amp; Co., Pittsburgh, for over five years.</p> <p>ROGER SHERMAN PHILLIPS is presently an executive, self-employed; prior thereto he was the publisher and president of World Events Magazine, Inc., and a publisher of <i>World, America's Magazine of World Events</i>.</p> <p>JOHN DENTON REILLY, solicitor, has been a member of the firm of Salter, Reilly &amp; Jamieson, solicitor, for over five years.</p>

Dated at Toronto the 20th day of April, 1955.



OKA RARE METALS MINING COMPANY LIMITED.

"C. G. HUNTER", *President*.

"B. W. N. APPLE", *Secretary*.

# STATEMENT SHOWING NUMBER OF SAHREHOLDERS as of April 7th, 1955

Number		Shares
24	Holders of 1 - 100 shares.....	1,806
154	" " 101 - 1000 " .....	91,777
32	" " 1001 - 2000 " .....	61,201
16	" " 2001 - 3000 " .....	42,700
6	" " 3001 - 4000 " .....	22,230
7	" " 4001 - 5000 " .....	35,000
32	" " 5001 - up " .....	1,689,196
272	Stockholders	Total shares.....1,943,910

NOTE—Since the date shown on the statement above, an additional 300,000 shares have been issued, as shown in item 10 on page 2.



# FINANCIAL STATEMENTS

## SUPPLEMENTAL FINANCIAL INFORMATION

Since March 31st, the date of the Balance Sheet published below, the Company has received the sum of \$350,000 from the sale of an additional 500,000 treasury shares as set out in item 10, page 2, and its cash position and issued capitalization have been increased accordingly.

### BALANCE SHEET AS OF MARCH 31, 1955

#### ASSETS

Cash in Bank.....		\$226,929.92
Unpaid subscription to capital stock.....		24,000.00
Equipment, at cost.....		2,974.35
Mining lands and rights at the consideration given therefor, consisting of 900,000 shares at 10c per share.....		90,000.00
Deferred charges:		
Developments.....	\$54,786.85	
Administration.....	15,953.23	
		<u>70,740.08</u>
		<u>\$414,644.35</u>

#### LIABILITIES

Accounts payable.....		\$	694.35		
Capital Stock:					
Authorized—5,000,000 shares of \$1.00 par value each.					
Issued or to be issued—1,743,910 shares as follows:					
	<i>Par</i>	<i>Discount</i>	<i>Agent's</i>	<i>Net</i>	
	<i>Value</i>		<i>Commission</i>		
For cash.....	\$ 843,910	\$ 483,580	\$36,380	\$323,950	
For mining claims.....	900,000	810,000	—	90,000	
	<u>\$1,743,910</u>	<u>\$1,293,580</u>	<u>\$36,380</u>	<u>\$413,950</u>	<u>\$413,950.00</u>
					<u>\$414,644.35</u>

NOTE.—An option is outstanding covering 700,000 shares of capital stock at prices ranging from 65c to \$1.00 per share.

Approved on behalf of the Board: "C. G. HUNTER", *Director*.  
"B. NIXON APPLE", *Director*.

#### AUDITORS' REPORT

To the Shareholders of  
Oka Rare Metals Mining Company Limited.

We have examined the balance sheet of Oka Rare Metals Mining Company Limited as at March 31, 1955, and the statement of deferred charges for the period from date of incorporation, March 22, 1954, to March 31, 1955. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, the above balance sheet and statement of deferred charges present fairly the financial position of the company as at March 31, 1955, and the results of its operations for the period ended on that date.

THORNE, MULHOLLAND, HOWSON & McPHERSON,

Toronto, Canada, April 11, 1955.

Chartered Accountants.

#### STATEMENT OF DEFERRED CHARGES

Period from Incorporation, March 22, 1954, to March 31, 1955

DEVELOPMENT:	
Diamond drilling.....	\$33,797.15
Stripping, trenching and cutting lines.....	2,585.87
Surveying.....	5,394.21
Engineering.....	4,285.77
Travelling expense.....	2,522.09
Assessment work.....	2,092.54
Sampling and assaying.....	1,480.05
Development licenses and taxes.....	615.00
Telephone and telegraph.....	874.23
Miscellaneous.....	1,139.94
	<u>\$54,786.85</u>
ADMINISTRATION:	
Incorporation and organization.....	\$ 1,490.00
Telephone and telegraph.....	930.55
Registrar and transfer fees.....	283.75
Travelling expenses.....	3,846.18
Stock issue expense.....	934.00
Legal and audit.....	6,014.73
Advertising and publicity.....	2,277.50
General expense.....	176.52
	<u>\$15,953.23</u>



# GEOLOGIST'S REPORT

## Location and Accessibility:

The properties of the Oka Rare Metals Mining Company Limited are comprised of four groups with a total of 5,738 acres. These four groups are located approximately thirty miles from Montreal and are easily available for direct connection with the St. Lawrence seaway. This method of transportation will mean very reasonable costs for the shipment of ore. The area is well supplied with electric power, housing accommodation and transportation facilities. It is also well serviced with railroad and road facilities. The various services which are usually required for a mining operation are available and present in this area. This means that for a large scale development no additional money is required for other services which usually have to be considered when developing mines in isolated mining sections.

## History of the Area:

In the summer of 1953, Columbium, Thorium, Uranium and other rare earth minerals were discovered at a location about four miles north-east of Oka. This occurrence and type of mineralization was investigated by the Molybdenum Corporation of America. The Molybdenum Corporation then undertook a program of diamond drilling and trenching in order to bulk sample and explore the economic possibilities of this deposit. In their work they have established the existence of extremely large tonnages of commercial ore. The ore carries commercial values of Columbium, Uranium, Thorium, Cerium and other related rare earth minerals. This work is still in progress and their plans for mining have now been completed. Their holdings are located in the same general "intrusive plug" as those of the Oka Rare Metals Mining Co. Ltd.

## Local Geology:

The general geology of the immediate area is briefly known as Pre-Cambrian. The properties of the Oka Rare Metals Mining Co. Ltd. are located in the igneous intrusive which has intruded the surrounding crystalline limestone, quartzite and gneiss of the Grenville Series. The intrusive is a mixture of quartz monzonite, granite and syenite. The host rock is mainly basic such as gabbro, anorthosite and other related alkaline types.

The intrusive has an elliptical surface outline which is approximately nine miles in diameter. The present surface has been unevenly eroded and certain sections are entirely covered by overburden while other parts of the intrusive protrude as "knobs" above the general topography. Due to the large percentage of overburden in this area the rocks lying immediately outside the intrusive area are still subject to proper geologic classification. In some instances, they have been classed as being early Palaeozoic or Late Pre-Cambrian. However, proper classification of these formations is of no economic importance as it is the intrusive "plug" that contains the valuable mineralization.

In the southerly portion of the intrusive "plug" we have what is known as the "Monteregian Hill" formation. Other "Monteregian Hill" intrusives may be present in the older intrusive plug. Due to the overburden conditions in this general area, "Monteregian Hill" intrusives have to be located by a radioactive and magnetic survey.

These "Monteregian" intrusives are considered to be of Tertiary Age. Their existence on the present surface position is probably due to fault movement. This gives the area within the "intrusive plug" two stages of mineralization. One stage in the Pre-Cambrian and another later stage on the Tertiary Age. These two stages of mineralization are no doubt the reason for such a peculiar association of minerals. This might also be the reason why the presence of Thorium, Columbium, Uranium, Cerium and other rare earth minerals have been found in the same deposit and so intimately associated with each other.

## Development Work:

Group No. 1 of the Oka Rare Metals Mining Co. Ltd., which is located in the Parish of St. Joseph and is comprised of 1,249 acres, was selected as the first group on which to do the detail work. This work was in the form of a systematic detailed "radioactive and magnetic" survey. Both radioactive and magnetic readings were taken at regular intervals along grid lines. This work was supplemented by detailed geological mapping. Ten "radioactive-magnetic" anomalies were located on Group No. 1. Group No. 2 and Group No. 3 had a limited amount of "radioactive-magnetic" surveying but there is reason to believe that the general condition as existing on these two groups is no different to the type of formation present on Group No. 1.

## Discovery of Columbium Ore Values:

A Columbium, Thorium, Uranium discovery was made on Mineral Claim 83771 which was indicated by a "radioactive-magnetic" anomaly and which was completely covered by overburden. On trenching, this anomaly revealed the presence of a "Monteregian" intrusive. This intrusive was exposed by trenching across a section of 35 by 40 feet. The mineralization was composed of columbium, perovskite, pyrochlore, and columbium-bearing titanium magnetite. It was impossible to do any further trenching on this without involving a great deal of additional expense due to the fact that in some instances the trenches were over eight feet deep. To trench beyond this depth would prove too costly. This trench exposed solid sections of the "Monteregian" intrusive locally identified as Okaite, which was highly radioactive and which carries a commercial percentage of Columbium. The average Columbium values in this trench area of 35 by 40 feet were .46 per cent columbium pentoxide and .14 per cent combined uranium oxide equivalent. This combined .14 per cent uranium oxide equivalent is mainly due to the presence of thorium.

## Diamond Drilling Programme:

In November, 1954, a diamond drilling programme, designed to meet the required assessment needs of the large number of claims held by the company, was commenced. Three diamond drill machines were used for this purpose. This work necessitated doing diamond drilling over a very wide area. The total amount of diamond drilling for assessment purposes was 3,000 feet.

To date, ten diamond drill holes have been drilled on the ore structure with a total footage of approximately 3,500 feet. The Columbium bearing formation strikes north 30 degrees west and dips to the southeast. The diamond drill results assayed from .10 to .75 per cent of columbium pentoxide. The diamond drilling intersected ore sections in each diamond drill hole. The ore sections are in the Okaite intrusive accompanied by a high degree of biotite replacement. The area that has been drilled has, so far, an indicated length of 400 feet and is open at both ends. The drill holes intersect the ore structure at a vertical depth of 200 and 300 feet. This diamond drilling has already indicated an ore body that is 400 feet long and having a slope length along the dip of 350 feet with an average width of about 15 feet. This immediate area will yield 200,000 tons of columbium ore averaging .55 per cent columbium pentoxide.

This tonnage figure can be greatly increased as the drilling has been done to rather a shallow depth and there is no indication of the ore structure showing any variation to that shown in the initial diamond drilling programme. If anything, the sections at a vertical depth of 300 feet are wider than that indicated in the surface trench. Similarly, subsequent diamond drilling should result in the development of a much larger tonnage. The structure is strong and alteration which accompanies the columbium values is very intense and widespread.



### Value of Ore:

The unit of price for columbium is considered as columbium pentoxide and valued at \$3.40 per pound of contained columbium pentoxide. It is known that much higher prices are being obtained by producers for columbium pentoxide in cases where contracts have been made with the United States Government.

The other metals present in the ore are the rare earth metals. The combined average of this group is about one per cent and is valued at approximately \$20 per ton. The combined values of the columbium pentoxide and the rare earth minerals give a total valuation of \$57.40 per ton. The columbium pentoxide is valued at \$37.40, whereas the rare earths are valued at \$20.00 per ton.

The above values are further enhanced by a combined equivalent value of .14 per cent uranium oxide. The majority of this is thorium oxide, and if thorium is used for atomic power purposes for the production of U-233, it is difficult to know the exact price of this metal in the form of the oxide.

### Test Work:

Preliminary mill tests indicate that the ore-bearing columbium values can be concentrated by a magnetic-flotation separation. A sample was taken from the surface trench which ran one per cent columbium pentoxide. The sample was subjected to magnetic separation and subsequently to flotation to remove the biotite. The concentrate ran 10 per cent in columbium pentoxide. This preliminary work was conducted by a company who is a producer of the columbium metal. For various reasons the name of the company cannot be disclosed, but we were assured that a columbium pentoxide concentrate could be produced and readily sold. The columbium pentoxide occurs in the perovskite mineralization which is similar to the occurrence of columbium pentoxide in Norway. These Norwegian deposits have been and are being mined. The columbium pentoxide concentrate is being shipped to and refined in the United States.

Additional mill tests and a pilot plant will be built to treat the columbium pentoxide-perovskite mineralization. The objective and outlook is to concentrate the Oka Rare Metals ore on a substantial tonnage basis.

### Conclusions:

1. The total combined columbium pentoxide and rare earth oxide values run \$57.40. This value per ton will be further increased by the presence of thorium oxide, and uranium oxide which have a combined equivalent value of .14 per cent. Calculating the .14 per cent equivalent as uranium oxide would mean a total valuation of \$76.25 per ton.

2. The initial indicated ore by diamond drilling is 200,000 tons to a vertical depth of 300 feet, or approximately 700 tons per vertical foot.

3. The indicated ore is open on strike at both ends and shows no change as to the width of the zone at a vertical depth of 300 feet.

4. Preliminary mill tests conducted by a company who is producing columbium pentoxide concentrates show that the perovskite columbium pentoxide mineralization can be concentrated to produce a high grade concentrate which can be used in the production of columbium metal.

5. It should be pointed out that accurate projection of unit milling costs is not possible at this time. At this stage tentative figures have to be considered and the full economics will be more definitely arrived at by subsequent mill tests.

6. The minimum value of the ore as indicated to date is \$76.25 per ton based on today's quoted prices of \$3.40 for the columbium pentoxide. This is based on values of columbium, uranium and rare earth oxides only. The location of this property is such that underground costs should not exceed \$6.00 per ton for mining. Therefore, the price of columbium pentoxide could be greatly reduced and Oka Rare Metals still prove to be a very profitable operation. At a valuation of \$76.25 per ton the approximate valuation of the ore indicated to date is \$15,000,000.

### Recommendations:

1. Continue the present diamond drilling programme and extend the ore picture. Complete the magnetic radioactive survey on the balance of the acreage.

2. Proceed to go underground either by an adit or shaft for bulk sampling and preparations for mining on the present indicated ore body. The value of the currently indicated ore justifies underground exploration and extensive pilot mill work.

Respectfully submitted,

April 4, 1955, Winnipeg, Manitoba.

"M. G. SMERCHANSKI",  
*Consulting Mining Geologist.*

### CERTIFICATE

I, Mark G. Smerchanski, of the City of Winnipeg, in the Province of Manitoba, hereby certify:

1. That I am a Mining Geologist and reside at 411 Childs Building, in the City of Winnipeg, Manitoba.
2. That I am a graduate of the University of Manitoba and the Virginia Polytechnic Institute and have been practising my profession as a Consulting Mining Geologist for 12 years.
3. That I have a direct interest of 8,000 shares in the securities of the Oka Rare Metals Mining Co. Ltd.
4. That the accompanying report is based on personal examination of the property and neighbouring properties referred to in the report.
5. That I examined and worked on the property referred to in the accompanying report since March 1st, 1954, to the present time.

Dated at Winnipeg, Manitoba, this 4th day of April, 1955.

"M. G. SMERCHANSKI."



